SYSTEM AND METHOD FOR GENERATING ACCOUNTING DATA AND
COMPUTER-READABLE RECORDING MEDIUM RECORDED WITH PROGRAM FOR
CAUSING COMPUTER TO GENERATE ACCOUNTING DATA

5   BACKGROUND OF THE INVENTION

Field of the Invention

        The present invention generally relates to a system and a
        method for generating accounting data and a computer-readable
10   recording medium recorded with program for causing computer to
        generate accounting data, more particularly to a system for
        automatically generating household accounting data, a method for
        automatically generating household accounting data and a
        computer-readable recording medium recorded with a program for
15   causing a computer to generate the household accounting data.
        The present application claims priority of Japanese Patent
        Application No. 2000-118696 filed on April 19, 2000, which is
        hereby incorporated by reference.

20   Description of the Related Art

        Conventionally, in order to generate household account data,
        an operation for re-writing necessary items is periodically
        repeated. That is, for income items in a household account book,
25   necessary items are written based on salary details, and deposit
        information and transfer information recorded in a bankbook
        issued by a banking institution. Also, for expense items in the
        household account book, the necessary items are written based on
        receipts or other expenses.

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. By using household account generating software, the household account is generated. In this case, it is required to manually input data. Thus, a relatively large amount of time and workload is needed for the household account to be precise. Also,

5 it is required to pay careful attention to maintain receipts of purchases and receipts of sales.

Recently, it is realized that the household account data is electrically generated. For example, Japanese Laid-open Hei 9-293096 disclosed that when a consumer purchases products at

10 retail shops, transaction information including product names, quantities, prices, and like of the products is transmitted from retail shops to a banking institution managing an account of the consumer, which is to be charged. In the banking institution, a predetermined process is conducted for the transaction

15 information and then processed transaction information is electrically sent to a home of the consumer. It can be realized for the consumer to electrically generate household account data based on received transaction information.

However, in the conventional technology described above,

20 in a case in which the household account data is generated by using information of a settlement process as the expense information of the purchased products, for example, a relative longer time lag can be occurred between a date when the consumer purchased the products and another date when the retail shops charged to

25 the account of the consumer. Thus, discrepancies and errors can be caused in records of the household account.

SUMMARY OF THE INVENTION

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In view of the above, it is an object of the present invention to provide a system and a method for automatically generating accounting data and a computer-readable recording medium recorded with a program for causing a computer to generate accounting data
5   in which the above-mentioned problems are eliminated.

Also, it is another object of the present invention to provide a system and a method for automatically generating household account data and a computer-readable recording medium recorded with a program for causing a computer to generate
10   household account data which can reduce problems of inputting data and maintaining receipts and also can easily generate precise and reliable household account data.

According to a first aspect of the present invention, there is provided a system for generating accounting data, including:
15   an information collecting means for collecting expense information including purchasing instrument information obtained by a settlement process of a business transaction using a purchasing instrument capable for payment; and

a data generating means for generating accounting data of
20   a user of the purchasing instrument or a accounting summary of a household of the user.

In the foregoing first aspect, a preferable mode is one wherein the purchasing instrument is a debit card issued by a banking institution.

25   Also, a preferable mode is one wherein the expense information includes account information of a banking institution where the user or the household has an account; and

the data generating means conducts a calculating process and an editing process to the expense information and generates

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the accounting data.

Also, a preferable mode is one that wherein further includes a sending means for sending the accounting data to a predetermined receiving terminal through a communication line.

5 Also, a preferable mode is one wherein the information collecting means is provided in the banking institution and receives the expense information from a computer accumulating the expense information through a communication line.

Also, a preferable mode is one wherein the information 10 collecting means collects income information and the data generating means generates the accounting data of the user or the household account summary of the household of the user based on the expense information and the income information.

Also, a preferable mode is one that wherein further includes 15 a household account book data generating means for generating a household account book data based on the accounting data generated by the data generating means wherein the sending means sends the household account book data to a predetermined facsimile through the communication line.

20 Also, a preferable mode is one wherein the information collecting means is provided in the banking institution and receives the expense information from a computer accumulating the expense information through a communication line.

Also, a preferable mode is one wherein the receiving 25 terminal generates a accounting book data based on the accounting data received from the communication line.

Also, a preferable mode is one wherein the communication line includes Internet.

Also, a preferable mode is one wherein the receiving

terminal is an information processing apparatus provided in the
household of the user.

Also, a preferable mode is one wherein the receiving
terminal is an output terminal provided in the banking institution

5 or an automated transaction apparatus including a receiving
function for receiving the accounting data.

According to a second aspect of the present invention, there
is provided a method for generating accounting data, including
steps of:

10 (a) step for collecting expense information including
purchasing instrument information obtained by a settlement
process of a business transaction using a purchasing instrument
capable for payment; and

(b) step for generating accounting data of a user of the

15 purchasing instrument or a accounting summary of a household of
the user.

In the foregoing second aspect, a preferable mode is one
wherein:

the expense information includes account information of a

20 banking institution where the user or the household has an
account; and

the step (b) conducts a calculating process and an editing
process to the expense information and generates the accounting
data.

25 According to a third aspect of the present invention, there
is provided a computer-readable recording medium recorded with
a program for causing a computer to generate accounting data,
including codes of:

(a) code for collecting expense information including

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purchasing instrument information obtained by a settlement
process of a business transaction using a purchasing instrument
capable for payment; and

     (b) code for generating accounting data of a user of the
5   purchasing instrument or a accounting summary of a household of
the user.

     In the foregoing second aspect, a preferable mode is one
wherein:

     the expense information includes account information of a
10 banking institution where the user or the household has an
account; and

     the code (b) conducts a calculating process and an editing
process to the expense information and generates the accounting
data.

15   With the above configurations, it is possible to reduce
problems of inputting data and maintaining receipts, and also it
is possible to easily and precisely generate a household account
book.

     Also, for example, the debit card transaction information,
20 which is a result of the immediate settlement by use of the debit
card, is used as the expense information when a product is
purchased. Therefore, it is possible to generate a precise and
reliable household account book without a time lag.

25   BRIEF DESCRIPTION OF THE DRAWINGS

     Other objects, features and advantages of the present
invention will become more apparent from the following detailed
description when read in conjunction with the accompanying

drawings, in which:

Fig.1 is a block diagram showing a configuration of a household account generating system according to a first embodiment of the present invention;

5　Fig.2A is a block diagram showing a configuration of a household account data generating program stored in a program storing unit according to the first embodiment of the present invention and Fig.2B is a block diagram showing a configuration of an information storing unit of a household account data

10　generating apparatus configured in the household account generating system according to the first embodiment of the present invention;

Fig.3 is a diagram showing transaction detail data stored in a transaction detail data storing area of the information

15　storing unit according to the first embodiment of the present invention;

Fig.4 is a diagram showing calculated data stored in a calculated data storing area of the information storing unit according to the first embodiment of the present invention;

20　Fig.5 is a diagram showing a household account book output from a printing unit of an information processing apparatus configured in the household account generating system according to the first embodiment of the present invention;

Fig.6 is a flowchart for explaining operations of the

25　household account data generating apparatus according to the first embodiment of the present invention;

Fig.7 is a block diagram showing a configuration of a household account generating system according to a second embodiment of the present invention; and

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Fig.8 is a block diagram showing a configuration of a household account generating system according to a third embodiment of the present invention.

5 DESCRIPTION OF THE PREFERRED EMBODIMENTS

Best modes for carrying out the present invention will be described in further detail using an embodiment with reference to the accompanying drawings.

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First Embodiment

Figure 1 is a block diagram showing a configuration of a household account generating system according to a first
15 embodiment of the present invention. Figure 2A is a block diagram showing a configuration of a household account data generating program stored in a program storing unit and Fig.2B is a block diagram showing a configuration of an information storing unit of a household account data generating apparatus configured in
20 the household account generating system. Figure 3 is a diagram showing transaction detail data stored in a transaction detail data storing area of the information storing unit. Figure 4 is a diagram showing calculated data stored in a calculated data storing area of the information storing unit. Figure 5 is a
25 diagram showing the household account book output from a printing unit of the information processing apparatus configured in the household account generating system. And, Fig.6 is a flowchart for explaining operations of the household account data generating apparatus.

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As shown in Fig.1, the household account generating system 1 (corresponding to a system for generating a household account in claims) includes, for example, a household account data generating apparatus 2 for obtaining transaction data for each
5　household and automatically generating the household account data, host computers 3_1, 3_2, … , which are individually provided to banking institutions A, B, … including banks, for providing transaction data such as account information, debit card transaction information, and a like to the household account
10　generating apparatus 2 through a network N such as the Internet in response to a request, and information processing apparatuses 4_1, 4_2, … (corresponding to a receiving terminal in claims) provided in households P_1, P_2, … for receiving the household account data from the household account data generating apparatus
15　2 through the network N and then generating household account book.

The household account data generating apparatus 2 includes a controlling unit 21 for controlling each unit in accordance with a predetermined control program, a storing unit 22 for storing
20　various programs or data or a like, and a communicating unit 23 for conducting data communication in accordance with a predetermined protocol to any one of the host computers 3_1, 3_2, … or any one of the information processing apparatuses 4_1, 4_2, … .

25　The controlling unit 21 executes a household account generating process program recorded in a program storing unit 221 (that will be described later) of the storing unit 22. That is, the controlling unit 21 controls each unit of the household account data generating apparatus 2 by using various registers

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and flags provided in the storing unit 22 so as to generate
household account data.

The storing unit 22 includes a ROM (Read Only Memory) (not
shown), a RAM (Random Access Memory) (not shown), and a hard disk
5　　storage device (not shown). Also, the storing unit 22 may include
a semiconductor memory such as an IC memory card or a like, a floppy
disk storage device, or a magneto-optical disc storage device.
In addition, the storing unit 22 includes the program storing unit
221 for·storing various process programs including a household
10　　account data generating process program 2211 conducted by the
controlling unit 21, and an information storing unit 222 for
storing‧information including transaction data necessary to
generate the household account data obtained from any one of the
host computers 3_1, 3_2, … through the communicating unit 23.
15　　The household account data generating process program 2211 stored
in a program storing unit 221 includes a data collecting process
program 221a for periodically collecting transaction data such
as general account information, debit card transaction
information or a like from the host computers 3_1, 3_2, … through
20　　the communicating unit 23 and then temporarily storing the
transaction data; a data accumulating process program 221b for
additionally providing management information (collection date,
collection serial number and a like) to each detailed statement
of the transaction data, for example, generating transaction
25　　detail data as shown in Fig.3, and then storing the transaction
detail data; a calculating process program 221c for calculating
the transaction detail data, for example, for each account,
obtaining calculation data as shown in Fig.4, and then storing
the calculation data; an editing process program 221d for

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conducting an editing process to the calculation data so as to
create the household account data adjusted in a predetermined form
for a specific period specified by user and then storing the
household account data; and a sending process program 221e for
5　sending the household account data to the information processing
apparatuses 4_1, 4_2, … through the communicating unit 23.

Also, the information storing unit 222 includes a collected
data storage area 222a for temporarily storing the transaction
data obtained through the communicating unit 23, a transaction
10　detail data storage area 222b for storing the transaction detail
data, a calculation data storage area 222c for storing calculated
data, and a household account data storage area 222d for storing
the household account data.

The host computers 3_1, 3_2, … include controlling units 31_1,
15　31_2, … for controlling each unit in accordance with a predetermined
control program, storing units 32_1, 32_2, … for storing various
programs and data, communicating unit 33_1, 33_2, … for communicating
with the household account data generating apparatus 2 in
accordance with a predetermined protocol.

20　The controlling units 31_1, 31_2, … execute a transaction data
sending program or a like loaded in program storing units 321_1,
321_2, … (that will be described later) of the storing units 32_1,
32_2, … , controls each unit of the host computer 3_1, 3_2, … by using
various registers and flags in the storing units 32_1, 32_2, …, and
25　then, for example, provides the transaction data to the household
account data generating apparatus 2.

Each of the storing units 32_1, 32_2, … includes a ROM (Read
Only Memory) (not shown), a RAM (Random Access Memory) (not
shown), and a hard disk storage device (not shown). Also, each

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of the storing units 32_1, 32_2, ... may include a semiconductor memory such as an IC memory card or a like, a floppy disk storage device, or a magneto-optical disc storage device. In addition, the storing units 32_1, 32_2, ... include the program storing unit 321_1,

5　321_2, ... for storing various process programs including the transaction data sending program conducted by the controlling units 31_1, 31_2, ... , and information storing units 322_1 322_2, ... for accumulating account information, the transaction data including debit card transaction data for each of households P_1, P_2, ...

10　Also, the storing units 32_1, 32_2, ... include various registers and flags used by the controlling units 31_1, 31_2, ... executing the programe.

It should be noted that the account information includes income information such as salary income information, expense

15　information such as public or private utility charge information, or a like.

For example, a member of the household P_1 purchases a product at a shop using a purchasing instrument as a debit card issued by the banking institution A, or B, or ... in which the member is

20　an account holder. Then, an amount of money for the product is immediately charged from a deposit account after a bank balance of the deposit account of the banking institution A, or B, or ... is checked. The debit card transaction information includes expense information as a result of an immediate settlement

25　process.

The information processing apparatuses 4_1, 4_2, ... are, for example, personal computers. The information processing apparatuses 4_1, 4_2, ... include controlling unit 41_1, 41_2, ... for controlling each unit in accordance with a predetermined control

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program, storing units 42_1, 42_2, … for storing various programs and data, communicating units 43_1, 43_2, … for conducting data communications with the household account data generating apparatus 2 in accordance with a predetermined protocol, input

5 units 44_1, 44_2, … for inputting necessary data, printing units 45_1, 45_2, … for printing generated household account book, and displaying units 46_1, 46_2, … for displaying the household account book.

The controlling unit 41_1, 41_2, … execute the household

10 account generating program or the like stored in program storing units 421_1, 421_2, … (that will be described later), control each unit of the information processing apparatuses 4_1, 4_2, … by using various registers and flags provided in the storing units 42_2, 42_2, … , and then, for example, generating a household account

15 book for a specific period specified by the user.

Each of the storing units 42_1, 42_2, … includes a ROM (Read Only Memory) (not shown), a RAM (Random Access Memory) (not shown), and a hard disk storage device (not shown). Also, each of the storing units 42_1, 42_2, … may include a semiconductor memory

20 such as an IC memory card or a like, a floppy disk storage device, or a magneto-optical disc storage device. In addition, the storing units 42_1, 42_2, … include the program storing unit 421_1, 421_2, … for storing various process programs including the transaction data sending program and the household account

25 generating program conducted by the controlling units 41_1, 41_2, … , and information storing units 422_1 422_2, … for storing received household account data or processed household account data. Also, the storing units 42_1, 42_2, … include various registers and flags used by the controlling units 41_1, 41_2, … executing the

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programs.

The household account generating program conducts a predetermined process to the received household account data and then generates the household account book. For example, the

5　household account generating program further can display a graph diagram.

Each of the input units 44_1, 44_2, … includes a keyboard, a pointing device such as a mouse, or a like.

Each of the printing units 45_1, 45_2, … prints out, for

10　example, a household account data as shown in Fig.5.

Each of the displaying units 46_1, 46_2, … includes a CRT (Cathode Ray Tube) display, an LCD (Liquid Crystal Display), a plasma display, or a like.

A household account generating method using the household

15　account generating system 1 will now be described with reference to Fig.6.

An example in Fig.6 shows a settlement process for a case in which a plurality of member of the household P_1 open accounts of the banking institutions A, B, … and they purchase products

20　by debit cards issued by the banking institutions A, B, … .

First, in step ST11, the controlling unit 21 of the household account data executes the data collecting process program 221a.

The controlling unit 21 collects the transaction data

25　including the general account information and the debit card transaction information, and temporarily stores the transaction information to the collected data storage area 222a. The transaction data includes a transaction amount of money, a detail item, a description of transaction, and a like.

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For example, in a case in which a member of the household P_1 has a deposit account (hereinafter, may also be called an account) of the banking institution A, when salary is electronically transferred to the account of the member, the

5　information storing unit 322_1 of the host computer 3_1 provided in the banking institution A stores that transaction as income information. When an electricity bill is drawn from the account of the member, the information storing unit 322_1 stores that transaction as expense information. Then, the income

10　information and the expense information are collected.

Also, when the member or another household member purchases a product at a shop with a debit card issued by the banking institution A, a transaction amount of money is immediately drawn after the banking institution A checks a bank balance of the

15　account. The information storing unit 322_1 stores and collects the transaction as the expense information.

Subsequently, the data accumulating process program 221b is executed (step ST12). As shown in Fig.3, the controlling unit 21 additionally provides management information (collection date

20　and collection serial number) to each transaction detail of the collected transaction data and then creates transaction detail data. The transaction detail data is accumulated in the transaction detail data storage area 222b.

Next, the collecting process program is executed (step

25　ST13). The controlling unit 21 calculates a total of the transaction detail data for each account as shown in Fig.4 so as to obtain calculation data. The calculation data is stored in the calculation data storage area 222c. For example, the calculation data may be categorized by item or date.

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Next, the editing process program is executed (step ST14).
The controlling unit 21 conducts the editing process to the
calculation data so as to create the household account data
adjusted in the predetermined form for a specific period specified

5　by the user.　The household account data is stored in the household
account data storage area 222d.

Next, the sending process program is executed (step ST15).
The controlling unit 21 sends the household account data to the
information processing apparatus 4_1 through the communicating

10　unit 23.

After that, in the information processing apparatus 4_1, the
controlling unit 41_1 receives the household account data through
the communicating unit 43_1 and executes the household account
generating program to create the household account for a specific

15　period specified by the user (for example, one month) for each
account of each of the banking institutions A, B, … based on the
received household account data.　Moreover, as shown in Fig.5,
the household account generating program synthesizes contents for
each account and generates the household account book including

20　data from any of the bank institutions A, B, … .　Furthermore,
for example, the household account generating program may
generate a pie chart showing a breakdown of income sources or a
breakdown of expenses or a line graph showing a sequential change
of a total amount of money for each item in order to compare with

25　data of previous months, and prints out the pie chart or the line
graph on the printing unit 45_1.

The household account data generating apparatus 2
simultaneously sends the transaction data to other households P_2,
P_3, … in the same manner.

According to the first embodiment, the household account data generating apparatus 2 collects the transaction data, automatically creates the household account data, and the sends the information processing apparatus 4_1, 4_2, … of the household P_1, P_2, … . Therefore, it is possible to eliminate an operation of data input and to reduce problems of maintaining receipts. In addition, it is possible to easily and precisely generate a household account book. Consequently, in each household P_1, P_2, … , it is possible to obtain the household account book precisely describing specific items without any special operation.

Also, for example, as the expense information of purchased products, the debit card transaction information, which is a result of the immediate settlement for use of debit card, is used. Thus, it is possible to generate the household account book that is precise and reliable much more than information of a settlement process for payments when a credit card is used and there is no time lag.

Second Embodiment

Figure 7 is a block diagram showing a configuration of a household account generating system 1A according to a second embodiment of the present invention.

As shown in Fig.7, a different point from the first embodiment is that household account generating apparatuses 5_1, 5_2, … are provided households P_1, P_2, …, respectively, and a household account book is output to each household.

The configurations of the second embodiment other than the point described above are the same as the configuration of the

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first embodiment and the explanation thereof will be omitted.

As shown in Fig.7, for example, the household account
generating system 1A (corresponding to a system for generating
a household account in claims) includes the household account
generating apparatuses 5_1, 5_2, … , which are provided for
households P_1, P_2, … , respectively, for obtaining transaction
data for each of the households P_1, P_2, … and then automatically
generating the household account book, and host computers 3_1, 3_2,
… , which are provided in banking institutions A, B, … , for
providing the transaction data including account information,
debit card transaction information or a like to the household
account generating apparatuses 5_1, 5_2, … through a network N such
as the Internet in response to a request.

For example, the household account generating apparatuses
5_1, 5_2, … are personal computers and include controlling units
51_1, 51_2, … for controlling each unit in accordance with a
predetermined control program, storing units 52_1, 52_2, … for
storing various programs and data, communicating units 53_1, 53_2,
… for communicating with the host computers 3_1, 3_2, … in accordance
with a predetermined protocol, input units 54_1, 54_2, … for
inputting necessary data, printing units 55_1, 55_2, … for printing
the generated household account book, and displaying units 56_1,
56_2, … for displaying the household account book.

The controlling units 51_1, 51_2, … execute the household
account generating program 2211 or the like stored in program
storing units 521_1, 521_2, … (that will be described later), control
each unit of the household account generating apparatuses 5_1, 5_2,
… by using various registers and flags provided in the storing
units 52_1, 52_2, … , and then generating the household account book.

Each of the storing units 52_1, 52_2, ... includes a ROM (Read
Only Memory) (not shown), a RAM (Random Access Memory) (not
shown), and a hard disk storage device (not shown). Also, each
of the storing units 52_1, 52_2, ... may include a semiconductor memory

5   such as an IC memory card or a like, a floppy disk storage device,
or a magneto-optical disc storage device. In addition, the
storing units 52_1, 52_2, ... include the program storing units 521_1,
521_2, ... for storing various process programs including a household
account generating program 2211 conducted by the controlling

10 units 51_1, 51_2, ... , and information storing units 522_1 522_2, ... for
storing received household account data or processed household
account data. Also, the storing units 52_1, 52_2, ... include various
registers and flags used by the controlling units 51_1, 51_2, ...
executing the programs.

15   The household account generating program 2211 stored in
each of the program storing units 521_1, 521_2, ... includes a data
collecting process program 221a for periodically collecting
transaction data such as general account information, debit card
transaction information or a like from the host computers 3_1, 3_2,

20 ... through a respective one of communicating units 53_1, 53_2, ... and
then temporarily storing the transaction data; a data
accumulating process program 221b for generating transaction
detail data and then storing the transaction detail data; a
calculating process program 221c for calculating the transaction

25 detail data and then storing the calculation data; and an editing
process program 221d for conducting an editing process of the
calculation data to adjust in a predetermined form, further, for
example, displaying a graph, creating household account data for
a specific period specified by the user and then storing the

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household account data.

　　　Also, the information storing units 522_1, 522_2, …
respectively include a collected data storage area 222a for
temporarily storing the transaction data obtained through the
5　communicating units 53_1, 53_2, … , respectively, a transaction
detail data storage area 222b for storing the transaction detail
data, a calculation data storage area 222c for storing calculated
data, and a household account data storage area 222d for storing
the household account data, similarly to the information storing
10　unit 222 in Fig.2B.

　　　A household account generating method using the household
account generating system 1A in the second embodiment is the same
as the household account generating method according to the first
embodiment of the present invention other than that the household
15　account generating apparatuses 5_1, 5_2, … perform both operations
of the household account data generating apparatus 2 in Fig.1 and
the information processing apparatuses 4_1, 4_1, … in Fig.1 according
to the first embodiment of the present invention, and the
explanation thereof will be omitted.

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                              Third Embodiment

　　　Figure 8 is a block diagram showing a configuration of a
household account generating system 1B according to a third
25　embodiment of the present invention.

　　　As shown in Fig.8, a different point from the first
embodiment is that facsimiles 7_1, 7_2, … , which are provided in
households P_1, P_2, … , respectively, receive household account
data generated by a household account generating apparatus 6 by

facsimile communication.

The configurations of the third embodiment other than the point described above are the same as the configuration of the first embodiment and the explanation thereof will be omitted.

5　　As shown in Fig.8, for example, the household account generating system 1B (corresponding to a system for generating a household account in claims) includes the household account generating apparatus 6 for automatically generating a household account book, host computers 3_1, 3_2, … , which are provided in banking institutions A, B, … , for providing the transaction data including account information, debit card transaction information or a like to the household account generating apparatus 6 through a network N such as the Internet in response to a request, and the facsimiles 7_1, 7_2, … , which are provided, for example, in the household P_1, P_2, … , for receiving the household account book from the household account generating apparatus 6 through a communication line.

The household account generating apparatus 6 includes a controlling unit 61 for controlling each unit in accordance with a predetermined control program, a storing unit 62 for storing various programs and data, a communicating unit 63 for communicating with the host computers 3_1, 3_2, … in accordance with a predetermined protocol and communicating with the facsimiles 7_1, 7_2, … .

25　　The controlling unit 61 executes the household account generating program 2211 or the like stored in program storing unit 521_1 (that will be described later), control each unit of the household account generating apparatuses 6 by using various registers and flags provided in the storing unit 62 and then

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generating the household account book.

The storing unit 62 includes a ROM (Read Only Memory) (not shown), a RAM (Random Access Memory) (not shown), and a hard disk storage device (not shown). Also, the storing unit 62 may include

5   a semiconductor memory such as an IC memory card or a like, a floppy disk storage device, or a magneto-optical disc storage device. In addition, the storing unit 62 includes the program storing unit 621 for storing various process programs including a household account-generating program 2211 conducted by the controlling unit

10   61, and information storing unit 622 for storing received household account data or processed household account data. Also, the storing unit 62 include various registers and flags used by the controlling unit 61 executing the programs.

The household account generating program 2211 stored in the

15   program storing unit 621 includes a data collecting process program 221a for periodically collecting transaction data such as general account information, debit card transaction information or a like from the host computers 3_1, 3_2, … through a communicating unit 63 and then temporarily storing the

20   transaction data; a data accumulating process program 221b for generating transaction detail data and then storing the transaction detail data; a calculating process program 221c for calculating the transaction detail data and then storing the calculation data; and an editing process program 221d for

25   conducting an editing process of the calculation data to adjust in a predetermined form, further, for example, displaying a graph, creating household account data for a specific period specified by the user and then storing the household account data.

Also, the information storing unit 622 includes a collected

data storage area 222a for temporarily storing the transaction data obtained through the communicating unit 63, a transaction detail data storage area 222b for storing the transaction detail data, a calculation data storage area 222c for storing calculated

5　data, and a household account data storage area 222d for storing the household account data, similarly to the information storing unit 222 in Fig.2B.

A household account generating method using the household account generating system 1B in the third embodiment is the same

10　as the household account generating method according to the first embodiment of the present invention other than that the household account generating apparatus 6 performs both operations of the household account data generating apparatus 2 in Fig.1 and the information processing apparatuses 4_1, 4_1, ... in Fig.1 according

15　to the first embodiment of the present invention, and the explanation thereof will be omitted.

As described above, in the third embodiment, it is possible to obtain similar effects to the first embodiment.

It is apparent that the present invention is not limited

20　to the above embodiments but may be changed and modified without departing from the scope and spirit of the invention.

For example, in the embodiments described above, the information processing apparatus 4_1, 4_2, ... , which are provided in the households P_1, P_2, ... , respectively, receives the

25　transaction data from the household account data generating apparatus 2. Alternatively, an ATM (Automated Teller Machine) or a CD (Cash Dispenser) can be configured as a receiving terminal in that a household account data receiving function, a household account generating function and a household account output

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function are provided, and may output or display the household
account book. Also, for example, a special terminal for
outputting or displaying the household account book may be
provided in any of the banking institutions A, B, … .

5   Alternatively, as a receiving terminal, a cellular phone
capable of communicating data can be used. Thus, for example,
the cellular phone may be used to confirm a balance of each account
to determine to the user in his/her decision process whether to
purchase an additional product during shopping.

10   Moreover, the network N is not limited to the Internet but
can include a dedicated communication line that can be any kind
of a communication such as a wireless or cable communication.

Furthermore, in the embodiments described above, the
transaction data is automatically sent to the information

15 processing apparatuses 4_1, 4_2, … from the household account data
generating apparatus 2. Alternatively, in response to a request
of the information processing apparatus 4_1, 4_2, … , only necessary
information (for example, income information, balance
information or a like for one day) can be sent to the information

20 processing apparatuses 4_1, 4_2, … from the household account data
generating apparatus 2.